

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Geoffrey B. Rhoads

Serial No. 09/198,022

Filed: November 23, 1998

For: SECURITY DOCUMENT WITH
STEGANOGRAPHICALLY-
ENCODED AUTHENTICATION
DATA

Examiner: Dr. B. Tadayon


Date: October 30, 2000



Art Unit 2721

CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS PAPER AND THE DOCUMENTS REFERRED TO AS BEING ATTACHED OR ENCLOSED HERewith ARE BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE ON October 30, 2000, AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231.


William Y. Conwell
Attorney for Applicant

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TRANSMITTAL LETTER

ASSISTANT COMMISSIONER FOR PATENTS:

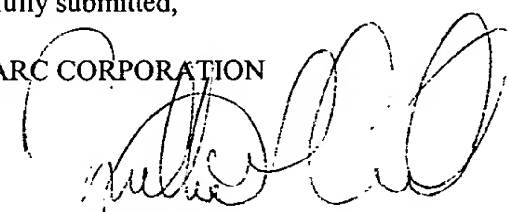
- ☒ Enclosed for filing in the above-captioned matter is a Reply Brief (in triplicate).
- ☒ No fee is believed due. However, please charge any fees which may be required in connection with filing these documents, or credit any overpayment, to Deposit Account No. 50-1071. A copy of this sheet is enclosed.

Respectfully submitted,

DIGIMARC CORPORATION

Date: October 30, 2000

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By 
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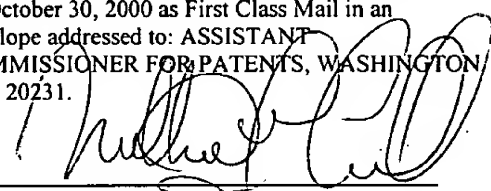
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William Y. Conwell
Attorney for Applicant

REPLY BRIEF

ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

Sir:

Responsive to the Examiner's Answer mailed September 8, 2000, applicant responds as follows:

Double-Patenting Rejection

Applicant notes with appreciation the withdrawal of the double-patenting rejection.

Rejection Based on Nathans

As to the remaining rejection based on Nathans, applicant reviews two misconceptions on which the rejection is based.

First, the Answer argues that Nathans teaches "steganographic" encoding.¹ It does not.

¹ As noted in the Appeal Brief, and not disputed by the Examiner, steganography means "to hide secret information in some other data without leaving any apparent evidence of data alteration." See Appeal Brief, footnote 6.

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The scrambling of the facial image taught by Nathans is *conspicuous* – the antithesis of steganographic. Nathans' scrambling *must* be conspicuous for his invention to work, because Nathans relies on a human viewer of the image (e.g., a guard) to make a judgment call – whether the image is scrambled or not.

See, for example, Nathans at Col. 2, lines 53-60, which notes that an object of the invention is to condition the guard to pay close attention to the photo. See also Col. 5, lines 7-20, where the inspecting guard must discern whether the photo is unscrambled or not. "If the image on the monitor is not fully descrambled, the guard is alerted."

If, as the Examiner asserts, Nathans' scrambling can be so slight as to be inconspicuous, then operation of the Nathans' system would fail from the outset: a "scrambled" image could not be distinguished by the guard from an unscrambled image.

Since both independent claims require "steganographic" encoding, and since Nathans teaches the opposite, the rejections must be reversed.

A second misconception reiterated in the Answer is the Examiner's argument that "the encoding process does not have to be reversible, or does not have to be decodable."²

Not so. Claim 1 requires this. It specifies that the plural bits of encoded digital data are "*recoverable by computer analysis of said graphic.*"

Nathans indisputedly does not meet this limitation. His PIN code determines how pixels of an image are scrambled. But, given a scrambled image, the PIN code leading to that scrambling cannot be recovered.

Since Nathans fails to teach an arrangement in which the encoded data is "recoverable," the rejection of claim 1 – and claims 2 through 16 dependent therefrom – must be reversed.

IDS

On June 26, 2000, applicant mailed an IDS citing newly discovered prior art, together with the appropriate certification and fee. The Examiner is asked to confirm his

² Answer, top of page 6.

consideration of such art by returning an initialed copy of the Form PTO-1449 to the undersigned.

Respectfully submitted,

DIGIMARC CORPORATION

Date: October 30, 2000

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